

REMARKS/ARGUMENTS

By the foregoing amendment, the originally-presented Claims 1-17 have been cancelled in favor new Claims 18-37.

The rejection of the claims as anticipated by Tsuchiya, U.S. Patent No. 5,992,180, is respectfully traversed. The Examiner is correct in identifying the rollers 2, 3 and 5 in Tsuchiya, which transport the glass plate between sections, e.g., 4 and 11, and rollers 5 as bending the glass plate in both the A and B directions. The bending of the glass plate in Tsuchiya is, of course, intentional, since it is indeed intended that the glass plate be bent into that bent shape as a final product.

While the present invention may have as an ultimate goal the bending of a plate into a compound curved plate, the present invention is directed to a transportation system for displacing the glass plate between working sections in a manner in which deflection of the glass plate does not occur due to its own weight while the glass plate is being transported. This prevents cracking in the glass plate, for example, during raising or lowering of the glass plate in the various sections.

Particularly, with respect to method Claim 18, the plate is bent into a concave shape in a first section, the bent glass plate is raised and transported to a second section where the bent glass plate is lowered, and the bending of the lowered bent glass plate is cancelled to restore the bent glass plate to a planar state. Thus, in Tsuchiya, while rollers bend the glass plate, Tsuchiya does not relate to a transportation system which restores the bent glass plate to a planar glass plate in the course of transporting the glass plate between sections. Thus, the objective of the present invention is accomplished in that the claimed method minimizes or precludes deflection of the glass plate due to its own weight while the glass plate is being transported between sections. This prevents the glass plate from cracking during raising or lowering of the glass plate. That is, by bending the glass plate within a restorable range, the section modulus of the geometrical moment of inertia of the plate becomes temporarily large so that the deflection of the glass plate due to its own weight ceases to

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occur during transport and, hence, cracking during, e.g., raising or lowering of the glass plate does not occur. The independent method Claims 18 and 22, as well as claims dependent therefrom, are directed to this feature.

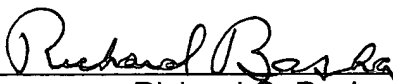
The apparatus Claims 26-37 are similarly directed to the foregoing feature and that feature is not disclosed in Tsuchiya.

With respect to Kuster, applied under both 35 U.S.C. §§102 and 103, this reference in relevant part is similar to Tsuchiya. That is, the glass plate in Kuster is purposefully bent by the bending mold into its ultimate shape. Nothing in Kuster discloses or suggests bending a planar glass plate in a first section, transporting the bent glass plate to a second section and restoring the bent glass plate to a planar state. The objective of preventing cracking of the glass during transportation is thus achieved by the novel method steps and apparatus recited in these claims.

Accordingly, reconsideration and allowance of the claims presently pending in the application is respectfully requested.

Respectfully submitted,

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